consisting of platinum, palladium and rhodium deposited thereon and (ii) a metallic sulfate having iridium deposited thereon by forming the catalyst of iridium, a rare earth metal oxide, and sulfur; and at least one element selected from a group consisting of calcium, strontium and barium, as catalyst active substances, wherein the iridium forms a complex oxide with said at least one element;

setting an exhaust-gas temperature in a range of 200°C to 700°C at an inlet to the catalyst for purifying the exhaust gas; and

directing the exhaust gas from an internal combustion engine through the catalyst for purifying the exhaust gas so as to reduce nitrogen oxides in the exhaust gas.

19. (Currently Amended) An exhaust-gas purifying process comprising:

preparing a catalyst for purifying exhaust gas comprising by forming the catalyst of iridium, a rare earth metal oxide, and sulfur; and at least one element selected from a group consisting of calcium, strontium and barium, as catalyst active substances, wherein the iridium forms a complex oxide with said at least one element; (i) a fire resistant inorganic compound having at least one element selected from the group consisting of platinum, palladium and rhodium deposited thereon and (ii) a metallic sulfate having iridium deposited thereon;

setting an exhaust-gas temperature in a range of 200°C to 700°C at an inlet to the catalyst for purifying the exhaust gas; and



OKUMURA et al Serial No. 09/778,103

directing the exhaust gas from an internal combustion engine through the catalyst for purifying the exhaust gas so as to reduce hydrocarbons, carbon monoxide and nitrogen oxides in the exhaust gas from the internal combustion engine.

20. (Currently Amended) An exhaust-gas purifying process comprising:

preparing a catalyst comprising <u>iridium</u>, a rare-earth metal and sulfur, wherein the rare-earth metal is an oxide containing at least one element selected from a group consisting of cerium, lanthanum, yttrium, neodymium and praseodymium; a fire-resistant inorganic compound having at least one element selected from the group consisting of platinum, palladium and rhodium deposited thereon, and a metallic sulfate having iridium deposited thereon;

setting an exhaust-gas temperature in a range of 200°C to 700°C at an inlet to the catalyst for purifying exhaust gas; and

directing an exhaust gas from an internal combustion engine through the catalyst to purify the exhaust gas and reduce nitrogen oxides in the exhaust gas.

21. (Currently Amended) An exhaust-gas purifying process comprising:

preparing a catalyst comprising <u>iridium</u>, a rare-earth metal and sulfur, wherein the rare-earth metal is an oxide containing at least one element selected from a group consisting of cerium, lanthanum, yttrium, neodymium and praseodymium; a fire-resistant inorganic compound having at least one element selected from the group consisting of platinum, palladium and rhodium deposited thereon, and a metallic sulfate having iridium deposited thereon;

setting an exhaust-gas temperature in a range of 200°C to 700°C at an inlet to the catalyst; and

directing an exhaust gas from an internal combustion engine to pass through the catalyst for purifying exhaust gas so as to reduce hydrocarbons, carbon monoxide and nitrogen oxides in the exhaust gas from the internal combustion engine.

22. (Currently Amended) An exhaust-gas purifying process comprising:

preparing a catalyst comprising iridium, a rare-earth metal and sulfur, wherein the rare-earth metal is a composite oxide containing at least one element selected from a group consisting of cerium, lanthanum, yttrium, neodymium and praseodymium, and at least one element selected from a group consisting of manganese, iron, cobalt, nickel, copper and zinc; a fire-resistant inorganic compound having at least one element selected from the group consisting of platinum, palladium and rhodium deposited thereon, and a metallic sulfate having iridium deposited thereon;

setting an exhaust-gas temperature in a range of 200°C to 700°C at an inlet to the catalyst for purifying exhaust gas; and

directing an exhaust gas from an internal combustion engine through the catalyst to purify the exhaust gas and reduce nitrogen oxides in the exhaust gas.

23. (Currently Amended) An exhaust-gas purifying process comprising:

preparing a catalyst comprising <u>iridium</u>, a rare-earth metal and sulfur, wherein the

rare-earth metal is a composite oxide containing at least one element selected from a

group consisting of cerium, lanthanum, yttrium, neodymium and praseodymium, and at



least one element selected from a group consisting of manganese, iron, cobalt, nickel, copper and zinc a fire-resistant inorganic compound having at least one element selected from the group consisting of platinum, palladium and rhodium deposited thereon, and a metallic sulfate having iridium deposited thereon;

setting an exhaust-gas temperature in a range of 200°C to 700°C at an inlet to the catalyst; and

directing an exhaust gas from an internal combustion engine to pass through the catalyst for purifying exhaust gas so as to reduce hydrocarbons, carbon monoxide and nitrogen oxides in the exhaust gas from the internal combustion engine.